

TECHNICAL DATA

(Not a Specification)

Product Name: **Palm Shortening, Organic, MP 36/38 (All Purpose)**

Source: Palm Fruit Oil (PFO) from the spineless palm tree (*Elaeis guineensis*)
(PFO may also be called Palm Oil in reference materials)

Manufacturing: The fruit of the palm is separated from the kernel, or pit, then the fruit is expeller pressed, organically bleached and deodorized.

Ingredients: Palm oil

Nominal Melting Point 36 - 38 °C. Spectrum's All Purpose shortening is approximately 50% saturated and 50% unsaturated fat, and contains no transomerized fats which are found in hydrogenated oils. It is used in a variety of baking applications from cookies and sweet goods to breads and rolls.

<u>Property</u>	<u>Typical Analysis</u>	<u>Method</u>
Appearance	White to off-white, creamy consistency and free of any grain texture when solid; slightly yellow and clear when melted.	Observation
Organoleptic	Bland Oil	Sensory Evaluation
Color (Lovibond)	≤3R	AOCS Cc 13b-45, 5¼ cell
Moisture+volatile matter	≤0.1%	AOCS Ca 2c-25
Free Fatty Acid	≤0.2%	AOCS Ca 5a-40, as Palmitic Acid
Peroxide Value	≤3.0 meq/kg	AOCS Cd 8b - 90
Iodine Value	50 to 55	AOCS Cd 1-25
Saponification Value	190 to 209	AOCS Cd 3-25
Smoke Point	230°C (446 °F)	AOCS Cc 9a-48
Slip Melting Point	36 to 38 °C (96 to 100 °F)	AOCS Cc 3-25

Typical Fatty Acid Profile (%) AOCS Ce 1e-91

C16:0	Palmitic	39 to 45
C18:0	Stearic	3 to 5
C18:1	Oleic	38 to 43
C18:2	Linoleic	9 to 11
C18:3	Linolenic	≤ 1

Solid Fat Content AOCS Cd 16-81

Temperature	Percent Solids
10°C (50°F)	52 - 60
20°C (68°F)	25 - 33
30°C (86°F)	8 - 12
35°C (95°F)	4 - 7

Note: In the above C(number):(number) terminology the second number refers to the degree of saturation or unsaturation of the fatty acid. A zero (0) means the fatty acid is saturated, a one(1) means it is monounsaturated, and a two or greater (2, 3, etc.) means it is polyunsaturated. The first number refers to the number of carbon atoms in the fatty acid chain.

Packaging and Storage: Store in a cool dry place (50 to 68 degrees F optimum) away from direct sources of sunlight, heat and oxidizers. Properly stored unopened containers have an expected shelf life of 18 months. Allow to stand at 70°F for 6 hours before using.

<u>Item Number</u>	<u>Size</u>	<u>Container Description</u>
130896	33 lb	Packing is in 33 lb cube. Food grade polyethylene bag-in-box. 60 units per pallet.

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